N-Bromosuccinimide, 99%

**General**

**Product Name**
N-Bromosuccinimide
NBS

**CAS RN**
128-08-5

**ACD Code**
MFCD00005510

**Structure**

**Molecular Formula**
C₄H₄BrN₂O₂

**Molecular weight**
177.99

**Pack size**

<table>
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<tr>
<th>Catalog</th>
<th>Qty / UM</th>
<th>Price (EUR)</th>
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<td>1 KG</td>
<td>117.10 Order Check stock</td>
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**Physical**

**Melting Point (°C)**
175 - 178

**Flash Point (°C)**
180

**Safety**

**GHS Pictogram**

**GHS Signal Word**
Danger

**GHS H statement**
H314: Causes severe skin burns and eye damage
H302: Harmful if swallowed

**GHS P statement**

P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P280: Wear eye protection/face protection
P305 + P312: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310: Immediately call a POISON CENTER or doctor/physician
P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

**Hazard**

C: Corrosive

**Risk**

22: Harmful if swallowed.
34: Causes burns.

**Safety**

22: Do not breathe dust.
26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Categories**

Preparation, Purification and Analysis  >  Routine Reagents
Functional Reagents  >  C-X Bond Formation (Halogen)  >  Bromination

**Applications**

**Function**
Reagent

**Transformation**
Deprotecting Group Chemistry Deglycosidation

**Type**
Oxidation of silyl ethers to aldehydes

**Caveat**
Treatment of n-pentenyl glycosides with NBS in 1% MeCN liberates the anomeric hydroxyl group.

**Reference**
SL 1990, 110, 2662
JACS 1988, 110, 2662

catalyzed by AIBN to corresponding aldehydes. Reaction of aldehyde with NBS in presence of AIBN provides acyl bromides in good yields.

**Reagent** Halogenation  
alpha-Halogenation of Boc-glycine ester  
NBS, hv, CCl4.  
OSC 1998, 9, 526

**Reagent** Halogenation  
alpha-Halogenation of carboxylic acids  
NBS in presence of catalytic HBr in CCl4 offers bromination of acyl halides in high yield.  
OS 1976, 55, 27

**Reagent** Halogenation  
Alcohol to Alkyl halide  
In presence of phosphine or phosphate converts alcohols to alkyl bromides with inversion.  
OR 1983, 291

**Reagent** Halogenation  
Alkene to halohydrin  
Formation of bromohydrins with NBS in DMSO - stereospecific Markovnikov addition.  
JACS 1968, 90, 5498

**Reagent** Halogenation  
Allylic halogenation  
OSC 1963, 4, 108

**Reagent** Halogenation  
Arene to haloarene  
Deactivated aromatics eg nitroarenes can be m-brominated with NBS in TFA in presence of H2SO4.  
SL 1999, 1245.

**Reagent** Halogenation  
Arene to haloarene  
Mild and regiospecific brominating agent for activated aromatics eg. Methoxybenzene.  
JOC 1995, 60, 5328

**Reagent** Halogenation  
Benzyl Halogenation  
OSC 1973, 5, 825

**Reagent** Oxidation  
Alcohol to ketone  
Oxidation of secondary alcohol in presence of primary alcohol.  
TL 1979, 2745

**Reagent** Oxidation  
Alkynes to alpha-diketones  
2Mol eq. NBS in DMSO.  
CJC 1971, 49, 1099

**Reagent** Oxidation  
Amine to amine oxide  
Oxime to nitrile oxide.  
JOC 1968, 37, 436

**Reagent** Oxidation  
Oxidation of allylic C-H bond  
Oxidation of allylic C-H bond  
JOC 1968, 37, 3976

**Reagent** Oxidation  
Sulfide to sulfoxide  
In anhydrous methanol with 1 eq. NBS.  
JOC 1997, 62, 7495

**Reagent** Rearrangements  
Hofmann  
In presence of DBU and NBS in MeOH, amides rearrange to amines in good yield.